

THAT WHICH IS CLAIMED:

1. An automatic car wash system designed to process multiple vehicles simultaneously, the system comprising:

5 an elongate path extending at least 20 feet;

a plurality of stations spaced along the elongate path, at least one of the plurality of stations including a spray assembly operable to direct a pressurized and/or high velocity fluid onto a vehicle at the station;

a control device operatively connected to the plurality of stations;

10 at least two detectors spaced along the elongate path and operatively connected to the control device, the at least two detectors designed to indicate the presence of at least one of the multiple vehicles to the control device;

at least one proximity device operatively connected to the control device for detecting a relative distance between multiple vehicles; and

15 a radio transmitter operatively connected to the control device, the radio transmitter operable to transmit information to the multiple vehicles via radio signals.

2. An automatic car wash system according to Claim 1, wherein the plurality of stations further include at least one device selected from the group consisting of a
20 wheel washing station, a dryer, a rotating brush, a wax applicator, and a rinsing device.

3. An automatic car wash system according to Claim 1, wherein at least one of the at least two detectors is a detector selected from the group consisting of pressure switch, contact switch, magnetic, photo eye, laser, and ultrasonic.

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4. An automatic car wash system according to Claim 1, further comprising a visual and/or audible communicator for conveying information to at least one driver of the vehicles.

5. An automatic car wash system according to Claim 1, wherein the control device is operable to assign a unique radio frequency to each of the multiple vehicles and direct specific information to each vehicle via the radio transmitter.

5 6. An automatic car wash system according to Claim 1, wherein the radio transmitter is operable to transmit information over a plurality of radio frequencies.

7. An automatic car wash system according to Claim 1, further comprising a plurality of station radio transmitters spaced along the elongate path that operate on a common frequency and are arranged to transmit information over a distance of no more than about 10 feet, wherein the control device is operable to direct specific information to each of the station radio transmitters so that the specific information can be directed to a particular vehicle depending on the location of the vehicle along the path of travel.

15 8. An automatic car wash system according to Claim 1, wherein the radio transmitter is operable to transmit information selected from the group consisting of instructions, warnings, advertisements, offers, incentives, entertainment, news, music, and combinations thereof.

20 9. An automatic car wash system according to Claim 1, wherein the control device is operable to control a predetermined throughput of vehicles traveling through the system by directing audible and visual driving instructions at the vehicles.

10. An automatic car wash system designed to concurrently process a plurality of vehicles including at least a first vehicle and a second vehicle, the system comprising:
an elongate path that defines a path of travel for the vehicles traveling along the path under their own power;
a first station positioned along the elongate path, the first station including a detector for detecting the presence of the first vehicle, and further including a spray assembly operable to direct pressurized and/or high velocity fluid against the first vehicle that is in a stationary position;

a second station positioned downstream of the first station along the path of travel, the second station including a detector for detecting the presence of the second vehicle, and further including at least one assembly selected from the group consisting of a brush assembly, a spray assembly, and a dryer assembly;

5 a control device operable to direct instructions to a driver of the first vehicle to proceed from the stationary position at the first station towards the second station;

 at least one proximity device operatively connected to the control device for detecting the relative distance between the vehicles; and

 a communication device operatively connected to the control device for providing
10 information to a driver of at least one of the vehicles regarding the relative distance therebetween.

11. An automatic car wash system according to Claim 10, further comprising a third station positioned along the elongate path, the third station including a detector for
15 detecting the presence of a third vehicle, and further including at least one assembly selected from the group consisting of a brush assembly, a spray assembly, and a dryer assembly.

12. An automatic car wash system according to Claim 10, further comprising
20 a fourth station positioned along the elongate path, the fourth station including a detector for detecting the presence of a fourth vehicle, and further including at least one assembly selected from the group consisting of a brush assembly, a spray assembly, and a dryer assembly.

25 13. An automatic car wash system according to Claim 10, wherein the control device is operable to direct concurrent stop instructions to at least two vehicles along the elongate path.

14. An automatic car wash system according to Claim 10, further comprising
30 a multiple-channel entrance designed to direct vehicles from at least two feed channels into a common entrance channel.

15. An automatic car wash system according to Claim 10, wherein at least one of the at least two detectors is a detector selected from the group consisting of pressure switch, contact switch, magnetic, photo eye, laser, and ultrasonic.

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16. An automatic car wash system according to Claim 10, wherein at least one of the stations includes a rotating brush, and wherein the system is selectable to engage the rotating brush against a vehicle.

10 17. A method of processing a plurality of vehicles through an automatic car wash having an entrance and exit, the method comprising:

directing a first vehicle to travel into the entrance and to a first station under the first vehicle's own power;

directing the first vehicle to stop at the first station;

15 directing the first vehicle to move forward under the first vehicle's own power to a second station; and

directing a second vehicle to travel into the entrance and towards the first station under the second vehicle's own power before the first vehicle has traveled past the exit of the automatic car wash under the first vehicle's own power.

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18. A method according to Claim 17, further comprising detecting a vehicle's movement between the entrance and the exit, and directing information to the vehicle.

19. A method according to Claim 18, wherein the information is directed to
25 the vehicle via radio transmission.

20. A method according to Claim 18, wherein the information directed to the vehicle includes instructions designed to control the movement of the vehicle through the automatic car wash system.

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21. A method according to Claim 17, further comprising detecting each vehicle's position between the entrance and exit of the automatic car wash system and determining an action selected from the group consisting of sending instructions designed to control the movement of at least one of the vehicles, sending advertisements, offers, incentives, entertainment, news, music, and combinations thereof, and sending nothing.

22. A method according to Claim 17, wherein the directing into the entrance steps include directing the vehicles from at least one feed channel of at least two feed channels that combine into a common entrance channel at the entrance of the car wash.

23. A method according to Claim 17, further comprising directing one of the first and second vehicles over a wheel detector that corresponds to one of the first and second stations.

24. A method according to Claim 17, further comprising detecting the presence of the vehicles at a predetermined position in the car wash.

25. A method according to Claim 17, further comprising directing a third vehicle to travel into the entrance and towards the first station under the third vehicle's own power before the first vehicle has traveled past the exit of the automatic car wash under the first vehicle's own power.

26. A method according to Claim 17, further comprising directing a fourth vehicle to travel into the entrance and towards the first station under the fourth vehicle's own power before the first vehicle has traveled past the exit of the automatic car wash under the first vehicle's own power.

27. A method according to Claim 17, further comprising directing information to at least one of the vehicles via radio transmission before the vehicle is directed into the entrance, the information including at least one of wash selections and payment options.

28. A method of processing a plurality of vehicles through an automatic car wash having an entrance and exit, the method comprising:

directing a plurality of vehicles through the automatic car wash concurrently so that the vehicles travel through the automatic car wash under their own power between the entrance and exit of the automatic car wash;

detecting the relative distance between at least two vehicles of the plurality of vehicles;

sending information to at least one vehicle's driver relating to the relative distance between the at least one vehicle and an adjacent vehicle in order to effect a desired spacing between the at least one vehicle and the adjacent vehicle.

29. A method according to Claim 28 wherein the sending step including sending information via radio signals that can be received by a radio receiver inside the at least one vehicle.

30. A method according to Claim 28, wherein the sending step includes sending information that instructs the driver of the at least one vehicle to one of slow down the vehicle, speed up the vehicle, stop the vehicle, wait, and proceed.

31. A method according to Claim 28, wherein the directing step includes directing the vehicles along a path of travel that includes at least one detector for detecting the presence of a vehicle at a predetermined location along the path of travel.

32. A method according to Claim 28, further comprising directing a washing fluid towards at least one vehicle while the at least one vehicle is between the entrance and exit of the automatic car wash.